

# INITIAL ASSESSMENT FORM

## I. SITE NAME AND LOCATION

### 01 SITE NAME

Plant Services Degreasing Unit

### 02 ADDRESS

Idaho National Engineering Laboratory (INEL)

### 03 CITY

Scoville

### 04 STATE

Idaho

### 05 ZIP CODE

83403

### 06 COUNTY

Bingham

### 09 COORDINATES: NORTH

703.100

### EAST

370.660

### 07 COUNTY CODE

2

### 08 CONG. DIST.

2nd

10 DIRECTIONS TO SITE (Starting from nearest public road) West of Idaho Falls, Idaho on U.S. Highway 20 for 30 miles (48 km) then 4 miles (6 km) north on Taylor Blvd.

## II. OWNER/OPERATOR

### 01 OWNER (If known)

Department of Energy (DOE)

### 02 STREET ADDRESS

785 DOE Place

### 03 CITY

Idaho Falls

### 04 STATE

Idaho

### 05 ZIP CODE

83402

### 06 TELEPHONE NUMBER

(208) 526-1122

### 07 OPERATOR (If known)

Argonne National Laboratory

### 08 STREET ADDRESS

Taylor Blvd.

### 09 CITY

Scoville

### 10 STATE

Id.

### 11 ZIP CODE

83403

### 12 TELEPHONE NUMBER

208-526-7625

## III. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION YES X NO DATE    /    /   

### 02 SITE STATUS (Check one)

X A. Active SWMU    B. Inactive    C. Unknown

### 03 YEARS RECEIVED HAZ WAST

None /    /    /     
Start Stop Unknown

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED  
See Waste Information Section

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION  
See Hazardous Conditions and Incidents Section

## IV. INFORMATION AVAILABLE FROM

### 01 CONTACT

Clifford Clark

### 02 OF (Agency/Org.)

DOE-ID

### 03 TELEPHONE NUMBER

(208) 526-1122

### 04 PERSON RESPONSIBLE FOR ASSESSMENT

L. C. Witbeck

### 05 AGENCY

ANL-W

### 06 ORG. Safety, Security & Safeguards

### 07 TELEPHONE NUMBER

208-526-7537

### 08 DATE

9 / 30 / 86  
Mon Day Year

## WASTE INFORMATION

## I. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)	02 WASTE QUANTITY AT SITE
<input type="checkbox"/> A. Solid <input type="checkbox"/> B. Powder Fines <input type="checkbox"/> C. Sludge <input type="checkbox"/> D. Other _____	TONS _____ CUBIC YARDS <u>0.01</u> NO. OF DRUMS _____
<input type="checkbox"/> E. Slurry <input checked="" type="checkbox"/> F. Liquid <input type="checkbox"/> G. Gas	

03 WASTE CHARACTERISTICS (Check all that apply)

<input type="checkbox"/> A. Toxic	<input type="checkbox"/> D. Persistent	<input type="checkbox"/> G. Flammable	<input type="checkbox"/> J. Explosive
<input type="checkbox"/> B. Corrosive	<input type="checkbox"/> E. Soluble	<input checked="" type="checkbox"/> H. Ignitable	<input type="checkbox"/> K. Reactive
<input type="checkbox"/> C. Radioactive	<input type="checkbox"/> F. Infectious	<input type="checkbox"/> I. Highly Volatile	<input type="checkbox"/> L. Incompatible
			<input type="checkbox"/> M. Not Applicable

<input type="checkbox"/> A. Toxic	<input type="checkbox"/> D. Persistent	<input type="checkbox"/> G. Flammable	<input type="checkbox"/> J. Explosive
<input type="checkbox"/> B. Corrosive	<input type="checkbox"/> E. Soluble	<input checked="" type="checkbox"/> H. Ignitable	<input type="checkbox"/> K. Reactive
<input type="checkbox"/> C. Radioactive	<input type="checkbox"/> F. Infectious	<input type="checkbox"/> I. Highly Volatile	<input type="checkbox"/> L. Incompatible
			<input type="checkbox"/> M. Not Applicable

## II. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT	COMMENTS
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SLU	Sludge			
OLW	Oily Waste			
SOL	Solvents	57	LT	Safety-Kleen 105
PSD	Pesticides			
OCC	Other organic chemicals			
IOC	Inorganic chemicals			
ACD	Acids			
BAS	Bases			
MES	Heavy metals			

01 CATEGORY	02 SUBSTANCE	03 CAS	04 STOR/DISP	05 CONC.	06 MEASURE
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[illegible]

Use specific references, e.g., state titles, sample analysis reports, etc.  
Site inspections, personnel interviews, process records, laboratory records.

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# HAZARDOUS CONDITIONS AND INCIDENTS

## I. HAZARDOUS CONDITIONS AND INCIDENTS

01      A. GROUNDWATER CONT. 02      OBSERVED (Date     )      POTENTIAL  
03 NARRATIVE DESCRIPTION:      ALLEGED

Not Applicable

01      B. SURFACE WATER CONT. 02      OBSERVED (Date     )      POTENTIAL  
03 NARRATIVE DESCRIPTION:      ALLEGED

Not Applicable

01      C. CONTAMINATION OF AIR 02      OBSERVED (Date     )      POTENTIAL  
03 POPULATION POTENTIALLY AFFECTED 30 04 NARRATIVE DESCRIPTION      ALLEGED

Not Applicable

01      D. FIRE/EXPLOSIVE CONDITIONS 02      OBSERVED (Date     )      POTENTIAL  
03 POPULATION POTENTIALLY AFFECTED 30 04 NARRATIVE DESCRIPTION      ALLEGED

Not Applicable

01      E. DIRECT CONTACT 02      OBSERVED (Date     )      POTENTIAL  
03 POPULATION POTENTIALLY AFFECTED 30 04 NARRATIVE DESCRIPTION      ALLEGED

Not Applicable

01      F. CONTAMINATION OF SOIL 02      OBSERVED (Date     )      POTENTIAL  
03 NARRATIVE DESCRIPTION:      ALLEGED

Not Applicable

01      G. DRINKING WATER CONTAMINATION 02      OBSERVED (Date     )      POTENTIAL  
03 NARRATIVE DESCRIPTION:      ALLEGED

Not Applicable

## HAZARDOUS CONDITIONS AND INCIDENTS

## I. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01    J. DAMAGE TO FLORA 02    OBSERVED (Date       )    POTENTIAL  
 04 NARRATIVE DESCRIPTION:    ALLEGED

Not Applicable

01    K. DAMAGE TO FAUNA 02    OBSERVED (Date       )    POTENTIAL  
 04 NARRATIVE DESCRIPTION: (include name(s) of species)    ALLEGED

Not Applicable

01    L. CONTAMINATION OF FOOD CHAIN 02    OBSERVED (Date       )    POTENTIAL  
 04 NARRATIVE DESCRIPTION:    ALLEGED

Not Applicable

01    M. UNSTABLE CONTAINMENT OF WASTES 02    OBSERVED (Date       )    POTENTIAL  
 (SPILL RUNOFF, STANDING LIQUIDS/LEAKING DRUMS)  
 03 NARRATIVE DESCRIPTION:    ALLEGED

Not Applicable

01    N. DAMAGE TO OFFSITE PROPERTY 02    OBSERVED (Date       )    POTENTIAL  
 04 NARRATIVE DESCRIPTION:    ALLEGED

Not Applicable

01    O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02    OBSERVED (Date       )    POTENTIAL  
 04 NARRATIVE DESCRIPTION:    ALLEGED

Not Applicable

01    P. ILLEGAL/UNAUTHORIZED DUMPING 02    OBSERVED (Date       )    POTENTIAL  
 04 NARRATIVE DESCRIPTION:    ALLEGED

Not Applicable

## 05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

None

## III. COMMENTS None

## IV. SOURCES OF INFORMATION (List specific references, e.g., state titles, sample analysis, reports)

Site inspections, personnel interview, disposal quantity records, ANL-Wes  
 Installation Assessment Report, USGS Report IDO-22053 TID-4500 The Influence  
 of Liquid Waste Disposal on the Geochemistry of Water at the NRTS.

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## PRIORITY RANKING SYSTEM

### I. GENERAL FACILITY INFORMATION

FACILITY NAME: Plant Services Degreasing Unit

LOCATION: Idaho National Engineering Laboratory

POINT OF CONTACT: NAME: Argonne National Laboratory-West

ADDRESS: Scoville, Idaho 83403

PHONE: 526-7625

REVIEWER: Michael J. Holzemer

DATE: 9/30/86

### II. GENERAL FACILITY DESCRIPTION

GENERAL DESCRIPTION OF THE FACILITY: (For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

This degreasing unit used Varco solvent from 1984 to May 1986. These materials were placed in 55 gal drums along with old oil. These drums were disposed of as hazardous wastes. The solvent used now is Safety Kleen 105 solvent. This material is removed, replenished and disposed of by Safety Kleen Corp.

### III. SCORES

SM = 0 (S<sub>1</sub> = 0 S<sub>2</sub> = 0 S<sub>3</sub> = 0 S<sub>4</sub> = 0)

SFE = 0

SDC = 0

# GROUND WATER ROUTE WORKSHEET

RATING FACTOR	ASSIGNED VALUE (Circle one)	MULTI- PLIER	SCORE Ø	MAX. SCORE	REF. Section
3.2					
<b>1. ROUTE CHARACTERISTICS</b>					
Depth to Aquifer of Concern	① 1 2 3	2	0	6	
Net Precipitation	① 1 2 3	1	0	3	
Permeability of the Unsaturated Zone	0 1 2 ③	1	3	3	
Physical State	0 1 2 ③	1	3	3	
Total Route Characteristics Score			6	15	
<b>2. CONTAINMENT</b>					
	① 1 2 3	1	0	3	3.3
<b>3. WASTE CHARACTERISTICS</b>					
Toxicity/Persistence	0 3 6 9 ⑫ 15 18	1	12	18	3.4
Hazardous Waste Quantity	① 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics Score			12	26	
4. Multiply lines 1 x 2 x 3			0	1170	
5. Divide line 4 by 1170 and multiply by 100			Sgw=	0	

# SURFACE WATER ROUTE WORKSHEET

RATING FACTOR	ASSIGNED VALUE (Circle one)	MULTI- PLIER	SCORE Ø	MAX. SCORE	REF Section
1. ROUTE CHARACTERISTICS					
Facility Slope and Intervening Terrain	① 1 2 3	1	0	3	4.3
1-yr. 24-hr. Rainfall	0 ① 2 3	1	1	3	
Distance to Nearest Surface Water	① 1 2 3	2	0	6	
Physical State	0 1 2 ③	1	3	3	
Total Route Characteristics Score			4	15	
2. CONTAINMENT					
	① 1 2 3	1	0	3	4.3
3. WASTE CHARACTERISTICS					
Toxicity/Persistence	0 3 6 9 ⑫ 15 18	1	12	18	4.4
Hazardous Waste Quantity	① 1 2 3 4 5 6 7 8	1	0	8	
Total Waste Characteristics Score			12	26	
4. Multiply lines 1 x 2 x 3			0	1170	
5. Divide line 4 by 1170 and multiply by 100			Ssw=	0	

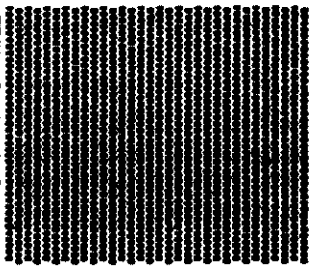
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# AIR ROUTE WORKSHEET

RATING FACTOR	ASSIGNED VALUE (Circle one)	MULTI- PLIER	SCORE	MAX. SCORE	REF. Section
1.HISTORIC RELEASE	① 45	1	0	45	5.1
Date and Location: See attached supplement pages					
If line 1 is 0, the Sa = 0. Enter on line 5.					
If line 1 is 45, then proceed to line 2.					
2.WASTE CHARACTERISTICS					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3.TARGETS					5.3
Population within 4-mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Target Scores				39	
4. Multiply lines 1 x 2 x 3			0	35100	
5. Divide line 4 by 35100 and multiply by 100 Sa = 0					

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	S	$S^2$
GROUNDWATER ROUTE SCORE (S <sub>gw</sub> )	0	0
SURFACE WATER ROUTE SCORE (S <sub>sw</sub> )	0	0
AIR ROUTE SCORE (S <sub>a</sub> )	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		0
$SQR(S_{gw}^2 + S_{sw}^2 + S_a^2)$		0
$SQR(S_{gw}^2 + S_{sw}^2 + S_a^2)/1.73 = SM$		0

DOCUMENTATION RECORDS  
FOR  
HAZARD RANKING SYSTEM

**INSTRUCTIONS:** As briefly as possible, summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

**FACILITY NAME:** Plant Services Degreasing Unit

**LOCATION:** Argonne National Laboratory-West/Idaho National Engineering Laboratory

**DATE SCORED:** 9/30/86

**PERSON SCORING:** Michael J. Holzemer

**PRIMARY SOURCE(S) OF INFORMATION:**

1. Personnel interviews
2. Operating procedures
3. 40 CFR 300, App. A
4. Sax, "Dangerous Properties of Industrial Materials", sixth edition

**FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:**

**COMMENTS OR QUALIFICATIONS:**

This degreasing unit is located within Building 753 in the maintenance shop

## GROUNDWATER ROUTE

### 1. OBSERVED RELEASE - Undertake Corrective Action

Contaminants detected (3 maximum):

No observed releases

Rationale for attributing the contaminants to the facility:

Not Applicable

### 2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Snake River Plain Aquifer

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

640 feet

Depth from the ground surface to the lowest point of waste disposal/storage:

0 feet

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

9.07 inches

Mean annual lake or seasonal evaporation (list months for seasonal):

36 inches

Net precipitation (subtract the above figures):

- 26.93 inches

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

An interbedded sequence of basaltic lava flows and  
sedimentary deposits.

Permeability associated with soil type:

$10^{-7}$  to  $10^{-3}$  cm/sec

Physical State

Physical state of substances at time of disposal (or at present time for  
generated gases):

Liquid

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Container (this is a degreasing tank)

Method of highest score:

The above containment has the highest score. Since this containment is a steel tank, the tank sits on a concrete floor and the waste is shipped off site as hazardous waste, a containment score of zero was assigned because of no ground water in the vicinity.

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Mineral spirits

Compound with highest score:

Mineral spirits

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

None

Basis of estimating and/or computing waste quantity:

Containment score of zero

# Checklist for Groundwater Releases

	<u>Yes</u>	<u>No</u>
<u>Identifying Release</u>		
1. <u>Potential for Groundwater Releases from the Unit</u>		
o Unit type and design		
- Does the unit type (e.g., land-based) indicate the potential for release?	—	<u>X</u>
- Does the unit have engineered structures (e.g., liners, leachate collection systems, proper construction materials) designed to prevent releases to groundwater?	<u>X</u>	—
o Unit operation		
- Does the unit's age (e.g., old unit) or operating status (e.g., inactive, active) indicate the potential for release?	—	<u>X</u>
- Does the unit have poor operating procedures that increase the potential for release?	—	<u>X</u>
- Does the unit have compliance problems that indicate the potential for a release to groundwater?	—	<u>X</u>
o Physical condition		
- Does the unit's physical condition indicate the potential for release (e.g., lack of structural integrity, deteriorating liners, etc.)?	—	<u>X</u>
o Locational characteristics		
- Is the unit located on permeable soil so the release could migrate through the unsaturated soil zone?	—	<u>X</u>
- Is the unit located in an arid area where the soil is less saturated and therefore a release has less potential for downward migration?	<u>X</u>	(Concrete) —
- Does the depth from the unit to the uppermost aquifer indicate the potential for release?	—	<u>X</u>

# Checklist for Groundwater Releases

	<u>Yes</u>	<u>No</u>
- Does the rate of groundwater flow greatly inhibit the migration of a release from the facility?	—	<u>X</u>
- Is the facility located in an area that recharges surface water?	—	<u>X</u>
o Waste characteristics		
- Does the waste in the unit exhibit high or moderate characteristics of mobility (e.g., tendency not to sorb soil particles or organic matter in the unsaturated zone)?	—	<u>X</u>
- Does the waste exhibit high or moderate levels of toxicity?	<u>X</u>	—
2. <u>Evidence of Groundwater Releases</u>		
o Existing groundwater monitoring systems		
- Is there an existing system?	—	<u>X</u>
- Is the system adequate?	<u>N/A</u>	<u>N/A</u>
- Are there recent analytical data that indicate a release?	—	<u>X</u>
o Other evidence of groundwater releases		
- Is there evidence of contamination around the unit (e.g., discolored soils, lack of or stressed vegetation) that indicates the potential for a release to groundwater?	—	<u>X</u>
- Does local well water or spring water sampling data indicate a release from the unit?	—	<u>X</u>

## Determining the Relative Effect of the Release on Human Health and the Environment

### 1. Exposure Potential

o Conditions that indicate potential exposure		
- Are there drinking water well(s) located near the unit?	—	<u>X</u>
- Does the direction of groundwater flow indicate the potential for hazardous constituents to migrate to drinking water wells?	—	<u>X</u>

## SURFACE WATER ROUTE

### 1. OBSERVED RELEASE - Undertake Corrective Action

Contaminants detected in surface water at the facility or downhill from it (3 maximum):

**No observed release**

Rationale for attributing the contaminants to the facility:

**Not Applicable**

### 2. ROUTE CHARACTERISTICS

#### Facility Slope and Intervening Terrain

Average slope of facility in percent:

**Less than 3 percent**

Name/description of nearest downslope surface water:

**Big Lost River**

Average slope of terrain between facility and above cited surface water body in percent:

**Less than 3 percent**

Is the facility located either totally or partially in surface water?

**No**



Is the facility completely surrounded by areas of high elevation?

Yes

1-year 24-Hour Rainfall in Inches

less than 2 inches

Distance to Nearest Downslope Surface Water

12 Miles

Physical State of Waste

Liquid

### 3. CONTAINMENT

#### Containment

Method(s) of waste or leachate containment evaluated:

None, intervening terrain precludes runoff from entering surface water

Method with highest score:

Assigned containment score of zero per 40 CFR 300, App. A,  
Section 4.3, table 9

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

Mineral spirits

Compound with highest score:

Mineral spirits

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

None

Basis of estimating and/or computing waste quantity:

Containment score of zero

# Checklist for Surface Water/Surface Drainage Releases

Yes

No

## Identifying Releases

### 1. Potential for Surface Water/Surface Drainage Release from the Facility

#### o Proximity to Surface Water and/or to Off-site Receptors

- Could surface run-off from the unit reach the nearest downgradient surface water body?        X
- Could surface run-off from the unit reach off-site receptors (e.g., if facility is located adjacent to populated areas and no barrier exists to prevent overland surface run-off migration)?        X

#### o Release Migration Potential

- Does the slope of the facility and intervening terrain indicate potential for release?        X
- Is the intervening terrain characterized by soils and vegetation that allow overland migration (e.g., clayey soils, and sparse vegetation)?        X
- Does data on one-year 24-hour rainfall indicate the potential for area storms to cause surface water or surface drainage contamination as a result of run-off?        X

#### o Unit Design and Physical Condition

- Are engineered features (e.g., run-off control systems) designed to prevent release from the unit? X
- Does the operational history of the unit indicate that a release has taken place (e.g., old, closed or inactive unit, not inspected regularly, improperly maintained)?        X
- Does the physical condition of the unit indicate that releases may have occurred (e.g., cracks or stress fractures in tanks or erosion of earthen dikes of surface impoundments)?        X

# Checklist for Surface Water/Surface Drainage Releases

	<u>Yes</u>	<u>No</u>
o Waste Characteristics		
- Is the volume of discharge high relative to the size and flow rate of the surface water body?	—	<u>X</u>
- Do constituents in the discharge tend to sorb to sediments (e.g., metals)?	—	<u>X</u>
- Do constituents in the discharge tend to be transported downstream?	—	<u>X</u>
- Do waste constituents exhibit moderate or high characteristics of persistence (e.g., PCBs, dioxins, etc.)?	—	<u>X</u>
- Do waste constituents exhibit moderate or high characteristics of toxicity (e.g., metals, chlorinated pesticides, etc.)?	<u>X</u>	—
2. Evidence of Surface Water/Surface Drainage Releases		
o Are there unpermitted discharges from the facility to surface water that require an NPDES or a Section 404 permit?	—	<u>X</u>
o Is there visible evidence of uncontrolled run-off from units at the facility?	—	<u>X</u>
<u>Determining the Relative Effect of the Release on Human Health and the Environment</u>		
1. o Are there drinking water intakes nearby?	—	<u>X</u>
o Could human and/or environmental receptors come into contact with surface drainage from the facility?	—	<u>X</u>
o Are there irrigation water intakes nearby?	—	<u>X</u>
o Could a sensitive environment (e.g., critical habitat, wetlands) be affected by the discharge (if it is nearby)?	—	<u>X</u>

AIR ROUTE

1. OBSERVED RELEASE

Contaminants detected: .

No observed releases

Date and Location of detection of contaminants:

Not Applicable

Methods used to detect the contaminants:

Not Applicable

Rationale for attributing the contaminants to the site:

Not Applicable

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Not Applicable

Most incompatible pair of compounds:

Not Applicable

Toxicity

Most toxic compound:

Mineral spirits

Hazardous Waste Quantity

Total quantity of hazardous waste:

None

Basis of estimating and/or computing waste quantity:

The material in the degreasing unit is not a hazardous waste until it is ready to be replenished

# Checklist for Air Releases

Yes

No

## Identifying Releases

### 1. Potential for Air Releases from the Facility

#### o Unit Characteristics

- Is the unit operating and does it expose waste to the atmosphere?        X

- Does the size of the unit (e.g., depth and surface area) create a potential for air release?        X

#### o Does the unit contain waste that exhibits a moderate or high potential for vapor phase release?

- Does the unit contain hazardous constituents of concern as vapor releases?        X

- Do waste constituents have a high potential for volatilization (e.g., physical form, concentrations, and constituent-specific physical and chemical parameters that contribute to volatilization)?        X

#### o Does the unit contain waste and exhibit site conditions that suggest a moderate or high potential for particulate release?

- Does the unit contain hazardous constituents of concern as particulate releases?        X

- Do constituents of concern as particulate releases (e.g., smaller, inhalable particulates) have potential for release via wind erosion, reentrainment by moving vehicles, or operational activities? N/A N/A

- Are particulate releases comprised of small particles that tend to travel off-site? N/A N/A

#### o Do certain environmental and geographic factors affect the concentrations of airborne contaminants?

- Do atmospheric/geographic conditions limit constituent dispersion (e.g., areas with atmospheric conditions that result in inversions)? X       

- Is the facility located in a hot, dry area?        X

## Checklist for Air Releases

Yes

No

### 2. Evidence of Air Releases

- o Does on-site monitoring data show that releases have occurred or are occurring (e.g., OSHA data)?        X
- o Have particulate emissions been observed at the site?        X
- o Have there been citizen complaints concerning odors or observed particulate emissions from the site?        X

### Determining the Relative Effect of the Release on Human Health and the Environment

#### 1. Exposure Potential

- o Is a populated area located near the site? X



# Checklist for Subsurface Gas Releases

Yes

No

## Identifying a Release

### 1. Potential for Subsurface Gas Releases

- o Does the unit contain waste that generates methane or generates volatile constituents that may be carried by methane (e.g., decomposable refuse/volatile organic wastes)?

—

X

- o Is the unit an active or closed landfill or a unit closed as a landfill (e.g., surface impoundments and waste piles)?

—

X

### 2. Migration of Subsurface Gas to On-site or Off-site Buildings

- o Are on-site or off-site buildings close to the unit?

X

—

- o Do natural or engineered barriers prevent gas migration from the unit to on-site or off-site buildings (e.g., low soil permeability and porosity hydrogeologic barriers/liners, slurry walls, gas control systems)?

—

X

- o Do natural site characteristics or man-made structures (e.g., underground power transmission lines, sewer pipes/sand and gravel lenses) facilitate gas migration from the unit to buildings?

—

X

## Determining the Relative Effect of the Release on Human Health and the Environment

### 1. Exposure Potential

- o Does building usage (e.g., residential, commercial) exhibit high potential for exposure?

X

—

## FIRE AND EXPLOSION

### 1. CONTAINMENT

Hazardous substances present:

No score was computed because neither a state or local fire marshal have certified that the facility presents a significant fire or explosion threat to the public or to sensitive environments.

Type of containment, if applicable:

Not Applicable

### 2. WASTE CHARACTERISTICS

#### Direct Evidence

Type of instrument and measurements:

Not Applicable

#### Ignitability

Compound used:

Not Applicable

#### Reactivity

Most reactive compound:

Not Applicable

#### Incompatibility

Most incompatible pair of compounds:

Not Applicable

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

57 Liters

Basis of estimating and/or computing waste quantity:

Capacity of degreasing unit

3. TARGETS

Distance to Nearest Population

0 feet (within Building 753)

Distance to Nearest Building

0 feet (within Building 753)

Distance to Sensitive Environment

Distance to wetlands:

Greater than 100 feet

Distance to critical habitat:

Greater than 1/2 mile

Land Use

Distance to commercial/industrial area, if 1 mile or less:

The INEL is a research facility. There are no commercial/industrial facilities within 1 mile.

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Greater than 2 miles

Distance to residential area, if 2 miles or less:

Greater than 2 miles

Distance to agricultural land in production within past 3 years, if 1 mile or less:

Greater than 1 mile

Distance to prime agricultural land in production within past 3 years,  
if 2 miles or less:

Greater than 2 miles

If a historic or landmark site (National Register or Historic Places  
and National Natural Landmarks) within the view of the site?

Big Southern Butte

Population Within 2-Mile Radius

688 employees at ANL-W

Buildings Within 2-Mile Radius

See attached plot plan

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No observed incident

2. ACCESSIBILITY

Describe type of barrier(s):

Security guards and fence barriers

3. CONTAINMENT

Type of containment, if applicable:

A degreasing tank (not accessible to anyone except ANL-W employees)

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Mineral spirits

Compound with highest score:

Mineral spirits

5. TARGETS

Population within one-mile radius

688 employees at ANL-W

Distance to critical habitat (of endangered species)

Greater than 1 mile

# ARGONNE NATIONAL LABORATORY

ARGONNE - WEST

P.O. Box 2528, Idaho Falls, Idaho 83403-2528

Telephone 208/526-7537

March 16, 1989

F. H. Weiler, Manager  
Environmental Restoration Program  
Department of Energy  
Idaho Operations Office  
785 DOE Place  
Idaho Falls, ID 83402

Subject: SUMMARY ASSESSMENTS FOR ANL-17, 26 & 27 SWMUs


Dear Mr. Weiler:

Enclosed are the Summary Assessments (7 copies each) for the following SWMUs:

ANL-17 Dry Well Underneath Building 720  
ANL-26 Critical Systems Maintenance Degreasing Unit  
ANL-27 Plant Services Degreasing Unit

It is understood that DOE-ID will submit these to EPA, Region X and the State of Idaho. If you have any questions please contact M. J. Holzemer at 526-7625.

Sincerely,



L. C. Witbeck  
Assist. to Mgr., SS&S

LCW/MJH.jam

Attachments: As Stated

cc: w/attach  
B. R. Fritz, DOE-CH  
J. L. Hooper, DOE-CH  
R. J. Teunis, w/o attach

bcc: w/o attach  
C. S. Abrams  
D. S. Kirschner  
P. Mikolaycik  
R. A. Peralta